CHAIN REACTION 2026

Do you love solving problems? Can you think of creative ways to use random objects? Chain Reaction Club might be for you! Chain Reaction is a club that designs a "complicated" machine to make something simple happen. It culminates with a district-wide competition on March 5th at District 54 PLC Building.

This year's theme is: ***OPEN A BOX***

Due to the highly competitive nature of this club and being limited to the amount of participants, this club will require an application process. Applications are due by Thursday, JANUARY 15th, 2026. The team will be announced on Friday, January 16th, 2026. With our first meeting on Tuesday, January 20th, 2026.

Our meeting dates will be:

- January 20th & 29th
- February 5th, 12th, 19th, 23rd, 26th & 27th
- March 2nd & March 3rd (Potentially until 5-6pm)

Name: _____ **Grade**: _____

Inspire Teacher: _____

How will you get home from Chain Reaction Club?

- ❑ Walk
- ❑ Get Picked Up
- ❑ 4 O'Clock Bus

Parent Signature: _____

Are you able to attend March 5th? Yes No Unsure

Chain Reaction Club Application

- Full Name: _____

- Grade Level: _____

Student Strengths:

  - [ ] Mechanical Design/Build
  - [ ] Physics/Calculations
  - [ ] Creative Arts/Theming
  - [ ] Organization/Writing

💡 Part 2: Motivation & Teamwork

1. Why do you want to participate in the Chain Reaction Club competition?

2. Collaboration is key to a successful build. What specific qualities do you possess that make you a strong team member?(Think about your communication style, reliability, or how you handle technical disagreements.)

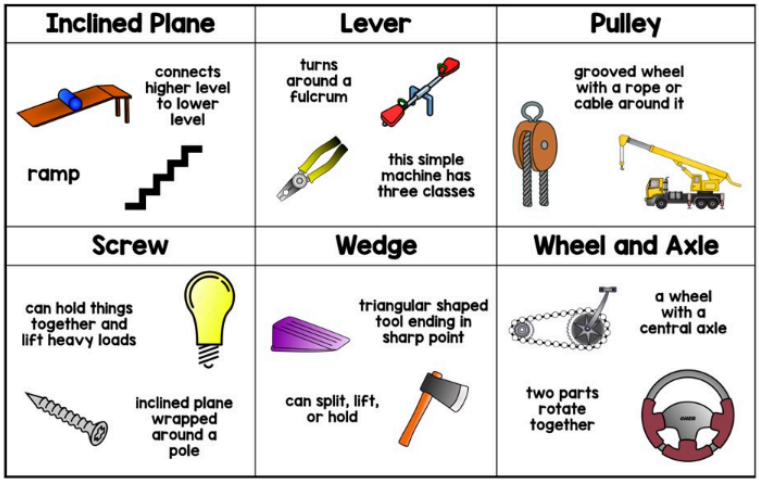
3. Trial and Error: These machines rarely work on the first try. Describe a time you faced a frustrating obstacle and how you persevered.

🎨 Part 3: Creative Theming

A Rube Goldberg machine is more than just physics; it tells a story! What are two creative themes you can think of that would logically (or hilariously) end with a box being opened? (Examples: "The Archaeologist's Discovery," "The Birthday Surprise," "The Secret Agent's Gadget.")

⚙️ Part 4: Engineering Challenge (Simple Machines)

A Rube Goldberg machine relies on the transfer of energy through Six Simple Machines:



The Task: Describe two consecutive steps in a potential machine design. You must use at least two different simple machines from the list above to move the action forward.
Step 1: (Describe the action and identify the simple machine used)

Step 2: (Describe how the energy from Step 1 triggers this next action)

🖌️ Part 5: Preliminary Concept Sketch

In the box below, provide a rough visual of one "trigger" or "transfer" point in your machine. Label your materials and the simple machines involved.

Sketch Area (Attach another paper if needed)

🚀 Submission Details

Please return this completed form to Mrs. Erlenborn in room 213 by **Thursday, January 15th, 2026**.

Note: Team will be announced on Friday, January 16th, 2026. Prepare to get messy, get creative, and most importantly, keep the chain reaction going!